a regional system, water supply services generally end up being delivered on the basis of the choices of individual communities. Those communities will often have several alternatives other than regional approaches (i.e., surface and groundwater).

When a proposed regional system encompasses users in different river basins it will likely require approval under North Carolina's interbasin transfer policy. Obtaining an interbasin permit is uncertain and difficult, and this can discourage the development of such systems. This might lead to higher costs and decreased water supply quality for some communities while increasing the reliance on raw water supplies that might be more environmentally sensitive or that have a lower sustainable yield than if interbasin transfers were more easily available.

Examples of Regionalization

As a result of the central coastal plan capacity use area (CCPCUA), the Neuse Regional Water and Sewer Authority was created to provide treated water from the Neuse River to its eight members. The members agreed to a minimum 7 mgd purchase contract (their current usage) that allows the NRWASA to service its $59 million debt on the USDA-funded 15 mgd plant.

The CCPCUA also created the incentive for Greenville to invite local communities to purchase excess capacity from its existing 22.5 mgd surface water treatment plant. Two communities, Farmville and Greene County, have signed forty-year contracts in which Greenville agrees to provide them water on an interruptible basis.

The Kerr Lake Regional Water System is a public water system serving the City of Henderson, City of Oxford, Town of Kittrell, Town of Norlina, Town of Warrenton, Town of Middleburg, Franklin County, and City of Louisburg. This system is planning to request an increase in its allowed interbasin transfer from the Roanoke to the Tar and Neuse river basins to meet supply needs until 2030.

After twenty years of planning, groundbreaking occurred in August of 2008 on a $42 million plant and $20 million network of lines and pumps for the Regional Water Treatment Plant at Randleman Reservoir serving communities in the Triad: Greensboro, High Point, Randolph County, Randleman, Archdale, and Jamestown. The plant is expected to begin providing drinking water to designated areas in 2010.

Interconnections

Traditional approaches to meeting demand, such as structurally augmenting supplies (e.g., reservoirs, wells), are becoming increasingly costly to develop while also imposing unpopular environmental impacts (Gleick 2000; NRC 2001). One method of increasing the efficiency of water allocation, both spatially and temporally, is through transfers of existing supplies between users (Jordan 1999). While there is no provision for the private ownership of raw water in the eastern United States, once water has been acquired and treated, utilities often have an ability to transfer treated water to other communities. When this transfer occurs between two otherwise independent water systems an interconnect is created.

Interconnections can reduce the risk of water supply shortfalls while saving money for the participating utilities. Risk reduction occurs because even nearby utilities can have differences in their supply of raw water, treatment plant capacity, usage patterns, and susceptibility to drought. By combining the water supply capacity of the